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AUTHOR Lewis-Webber, Mavis
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ABSTRACT

Early childhood educators and parents face the task of educating young children in Canada about environmental issues. The sooner young children participate in activities with an environmental theme, the more likely they are to appreciate the environment. This booklet is designed to introduce early childhood educators to environmental education with preschool children. Fourteen hands-on activities are presented to expose children to: (1) lifecycle of plants or objects; (2) how objects decompose; (3) what garbage is; (4) how to prepare a lunch without garbage; (5) trees; (6) birds; (7) ecosystems; (8) wildflower identification; (9) the community plant life; (10) earthcycles; (11) earthworms; (12) water quality; and (13) air pollution. Each activity provides background information, instructions on how to prepare; procedures to carry out the activity, and other activity ideas to explore. A selected bibliography of 38 citations contains children's book resources, identification resources, and activity resources. (MDH)

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ED 365 556

Earthcycles

Environmental Education with Preschool Children

Written and compiled by Mavis Lewis-Webber
Illustrated by David Morrow

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To Quinn and Nigel

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Learning and Caring About Our World
by Gayle Bittinger.
Warren Publishing House, Inc.
P.O. Box 2250
Everett, WA 98203

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Many others have contributed to the development of this book. Sheila Haynes-Grafton and Noreen Duncan provided positive feedback and ideas on implementation of activities with preschool children.

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For further information, please contact:
Earthcycles
c/o Manitoba Child Care Association
364 McGregor Street
Winnipeg, Manitoba
R2W 4X3
(204) 586-8587

Introduction

"We do not inherit the earth from our ancestors – we borrow it from our children."– anonymous

This popular phrase puts a great deal of responsibility on early childhood educators and parents to not only leave the earth in working order, but to instill in children an appreciation and respect for the earth's many cycles. Not only do we strive for a beautiful earth, but also one that will sustain the earth's cycles with clean air, land and water.

Early childhood educators and parents educating future generations face a formidable task. Environmental issues can be overwhelming and confusing for young children. We must assess the information and determine how we can pass it on to young children in a developmentally appropriate manner.

As the building blocks for developing responsible citizens begins in the preschool years, young children are an ideal target group for environmental education. The sooner young children participate in activities with an environmental theme the more likely they are to have a strong environmental appreciation as part of their value system.

The role of *Earthcycles* is to introduce early childhood educators to environmental education with preschool children. Educating young children about environmental issues need not be an overwhelming task. Learn together with the children as you consult identification resources, and learn from the children as they share their knowledge. But most of all begin to appreciate the wildflowers growing in your neighborhood, the different types of trees growing in the nearby park or the many bugs and beetles living in the neighborhood creek.

The notion that living things, and non-living material have a beginning and an end, or a lifecycle, is a concept that can begin simply and evolve into a complex form. Inter-relatedness of objects throughout our life is a concept children can begin to experience and thus understand. It is important to emphasize a child will not fully develop an understanding, but make a strong foundation upon which further development can be built. The framework grows as adults introduce children to activities which serve to broaden their initial experiences and to encourage more complex thinking.

Preschool children are developing language skills, and are eager to extend the experience by learning names of the animals, plants, and birds they observe. The adults' role is to provide the language which will give a means of talking and thinking about an occurrence. Children can be encouraged to sharpen observation skills if an adult explains details about the object being inspected.

With this knowledge respect develops. The theme of respect permeates all the activities in *Earthcycles*. Respect for people, animals, plants, birds, and inanimate objects is a valuable attitude to build upon throughout life. The world needs people who may not necessarily love earthworms or spiders, but who respect the role they play in the environment.

Environmental education is an interactive, sharing process. An adult's enthusiasm and basic knowledge of the natural environment will dictate to what degree young children develop an environmental appreciation as part of their value system.

Earthcycles encourages appreciation of the environment through active participation. A child's positive attitude towards the environment can develop hand in hand with knowledge and language skills during the preschool years. Fun, hands-on activities can be incorporated into the daily routine in a child care setting throughout the year. *Earthcycles* is intended to be a starting point for environmental education with preschool children. Consult the many excellent resources listed for new ideas.

Earthcycles is intended for use with 2–5 year old children in day care centres, nursery schools, family daycare homes and kindergartens. The term child care facility has been used throughout this publication to refer to all the different types of care. Early childhood educator is the term used to refer to child care workers, teachers and family daycare providers.

Where do things come from?

Background

Children often take all the materials at their disposal for granted. This activity is intended to draw attention to the fact that everything has a starting point and an eventual end point. The lifecycle of an apple will be used to demonstrate this point, but the lifecycle of any metal, plastic or food item can be illustrated for the children.

Preparation

A simplistic poster can be created to show the lifecycle of an apple. A cutting board, knives, a cooking pot and apples will be necessary to make applesauce. Prior to the activity remind the children of safety rules regarding the use of knives.

Activity

The lifecycle of an apple from seed–tree–small apple on tree–apple–applesauce can be explained with illustrations or through real examples. Find an apple tree in your neighborhood and watch it go through its lifecycle and explain to the children what is happening. If there are no apple trees, other fruit or berry trees can be used. Simplistic illustrations can show a seed growing into a tree, which develops apples. Mature apples can be picked and eaten. Make applesauce with the children with apples the children pick from a tree, or with apples bought at the store. It is important to stress apples come from trees, not stores! Plant apple seeds outside with the children, care for them and watch to see if they will grow.

Other Activity Ideas to Explore

An apple core can be used in the complement activity WHERE DO THINGS GO? to help the children begin to understand what happens to materials once they are disposed of.

Making paper can be followed through from the seed–tree–paper to the recycle paper stage.

A matching game can be made to pair up originating sources and the end product of items. For example, an apple tree would be the originating source and an apple would be one of the end products.

Resources

Apple Tree by Peter Parnall.

Where do things go?

Background

After doing the activity WHERE DO THINGS COME FROM? the children should begin to understand where everyday items like apples come from. This activity will show that some items break down very quickly, while others do so very slowly, or not at all. The rate at which an item biodegrades depends upon whether it contains natural or synthetic materials.

Preparation

A variety of materials, such as an apple core, piece of newspaper, foil and styrofoam should be gathered prior to group time. Gather the appropriate number of reusable (yogurt, margarine) containers. Soil, water, and a sunny location are also necessary.

Procedure

At group time show the children the materials and encourage them to share which ones are human-made and which ones are naturally occurring in the environment. Have the children plant the articles in a margarine container filled with soil. Ask the children to speculate which items will decompose, break down or biodegrade over time. Place the containers in the sun and water them every day. After a month dig up the contents and discuss what you see. Have the apple cores broken down at a faster rate than the paper or metal? Did the children guess correctly? This is the process that occurs when table scraps, leaves and grass are put in a composter. The decomposed material turns to a soil-like material which can then be used to fertilize your garden or flower beds. The discussion can continue with the topic of recycling glass, newspaper and aluminum. These items are very, very slow to break down in nature. Valuable land is used to dispose of these items in landfill sites, when the amount of space they consume could be reduced through recycling.

Other Activity Ideas to Explore

Set up a composter or worm composter with the children.

Involve the children in recycling at your facility.

What is garbage?

Background

The children will be encouraged to participate in a discussion of what garbage is and alternatives to disposing of it in a trash can.

Preparation

Gather a container or bag of typical garbage from your facility – food scraps, paper, aluminum can, newspaper, toilet paper roll etc.

Activity

Garbage is the byproduct of human consumption. During group time examine the facility's garbage with the children. Talk with the children about garbage as solid waste, and disposal alternatives. Divide the garbage into recyclable, compostable and reusable piles with the children. You may be surprised at the actual amount of garbage left. The 4 R's – reducing our consumption, reusing materials whenever possible, recycling glass, tin, newspaper etc. and recovering objects can be encouraged in your facility and with the parents.

The concept of one person's garbage is another person's gold can be illustrated to the children. For example, many materials such as toilet paper rolls, egg cartons or bits of ribbon may be garbage to some people but the children love to create with these materials in the art area.

Everything we use will eventually need to be disposed of – including large objects such as televisions. To reduce our consumption the lifetime of these items can be extended and then what is left can be reused, recycled and recovered. The children can be encouraged to share their ideas of how objects can be reused or recovered. For example, an old television can be carefully gutted and used as a puppet theatre.

The discussion regarding garbage can be ongoing as litter is seen on community walks and picked up to be disposed of in garbage containers.

Resources

Recyclers by Frances Kilbourne.

Canadian Garbage Collectors by Paulette Bourgeois.

Garbageless Lunch

Background

Everyone, and especially young children, benefit from practical demonstration to help fully understand concepts. Demonstrating the reduction of garbage with a garbageless lunch will help children recognize how they can reduce the amount of garbage in the trash can.

Preparation

Have two sample lunches packed to show the children as examples. One lunch should be wrapped in plastic, waxpaper, foil and contained in a brown bag. The other lunch should be in reusable containers and inside a lunchbox or cloth lunch bag.

Activity

Ask the children if they can think of ideas of how they could reduce and reuse at lunchtime. A comparison can be drawn with the children regarding a lunch contained in reuseable containers, and another lunch wrapped in paper and plastic. A drink box or can could be compared with a thermos. Consumption of paper and/or plastic can be reduced if margarine and yogurt containers are reused as lunch containers. Another aspect of a garbageless lunch that can be explored further is composting organic waste such as fruit and vegetable peels, uneaten bread and food scraps. Share this information with parents, and set a goal to become a completely garbageless lunch facility! Cloth lunch bags could also be made and sold as a fundraiser.

Other Activity Ideas to Explore

Set up a composter or worm composter with the children.

Resources

Worms Eat My Garbage by Mary Appelhof.

Composting with Kids prepared by the Recycling Council of Ontario.

"The Garbageless Lunch", Green Teacher No. 19.

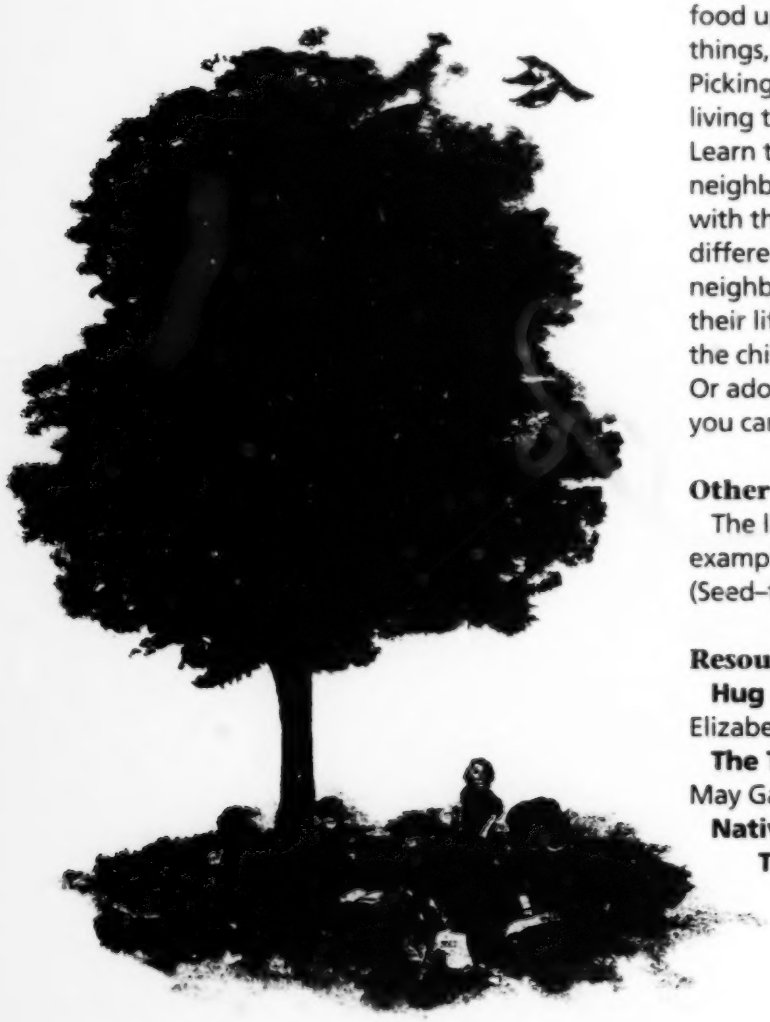
All about Trees

Background

Trees have many uses. They provide wood which is used to produce many products we use daily. Trees provide homes for animals and birds, shade, prevent soil erosion, absorb carbon dioxide and release oxygen into the environment. But most of all they are pretty to look at.

Preparation

A poster can be made for the children to illustrate the many purposes of a tree.



Activity

During group time share with the children the many wonderful purposes of trees. They are beautiful to look at, provide shade, share their branches so birds and small animals may build their homes. Trees absorb carbon dioxide and release oxygen into the atmosphere. The underground roots of a tree hold it down, prevent soil erosion, and take food up to all the branches. As with all living things, respect must be shown to trees. Picking leaves and breaking branches off a living tree will hurt and disrupt its growth. Learn the different types of trees in your neighborhood and share this information with the children. Show the children the different types of leaves. Closely observe neighborhood trees as they progress through their lifecycle. Plant and care for a tree, with the children, if space in your yard permits. Or adopt a tree in a neighborhood park that you can observe throughout the seasons.

Other Activity Ideas to Explore

The lifecycle of a wooden hockey stick, for example, could be illustrated to the children (Seed–tree–board–hockey stick).

Resources

Hug a Tree by Robert E. Rockwell, Elizabeth A. Sherwood, Robert A. Williams.

The Tremendous Tree Book by May Garelick and Barbara Brenner.

Native Trees of Canada by R.C. Hosie.

Tree by David Burnie.

Now I Know Trees by Sharon Gordon.

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For the Birds

Background

Birds are individuals just like people. They have distinctive habits, songs, food preferences, colours and sizes. To fully appreciate animals, in particular birds, it is important for children to begin to appreciate these differences. Observation and listening skills are fine tuned in the process of appreciating birds.

Preparation

This activity can be done at a variety of levels. The children's attention can be drawn to birds and their songs on community walks. Resources such as pictures of birds and tapes of their songs can be borrowed from your local library or naturalist society to utilize during this activity.

Activity

During circle time show the children pictures of a few different birds native to your area. The corresponding bird call on tape will help the children begin to appreciate the different songs, e.g. a crow caws, a chickadee says zee, zee. If available you can show the children an abandoned bird nest, feather, or egg. Only take bird nests from their natural habitat in the fall, as this will ensure they are truly abandoned. Bird feeders can be made from milk cartons, coffee cans, and stocked with sunflower seeds for chickadees, fresh fruit bits for blue jays, or cracked corn for starlings. Consult the resources for more ideas on food preferences of different birds. Birds should be fed from feeders in the winter and spring only. If fed in the summer and fall their migration may be dangerously delayed.

Other Activity Ideas to Explore

A chart with pictures of local bird species and their names can be hung up by the window overlooking your bird feeders to ensure easy identification. Share the bird identification books with the children.

In the winter make a living Christmas tree by stringing raisins, apple pieces, cranberries, peanuts, and popcorn and decorate a tree outside for the birds.

Extend this activity to observing birds and listening for their songs whenever you are outside. Educate yourself and the children on the simple, slow-paced joy of birding!

Resources

The Bird Feeder Guide by Marcus Schneck.

Birdwatching for all Ages by Jorie Hunken.

A Field Guide to Birds by Roger Tory Peterson.

What is a Bird? by Ron Hirschi.

Birds at my Feeder by Bobbie Kalman.

Ecosystem in a Jar

Background

The earth is a large ecosystem or community of organisms interacting with each other and the environment. Air, water, plants and animals continuously go through cycles of renewal, growth and decay. Water and sediments taken from a pond or creek support an abundance of plant and animals which

can be sealed in a jar and observed for years to come. This ecosystem in a jar will allow the children to observe an enclosed self–maintaining system that can be equated to the larger world.

Preparation

To gather the pond or creek water, rocks and plants, you will need two buckets, such as clean ice cream pails, with lids and a small fish net. To set up the ecosystem you will require a large (4 litre) clean jar, an aquarium aerator, melted wax and tape. This activity requires close adult supervision with a small group of children to ensure safety at all times. As you are near water, safety rules should be given to the children prior to arriving at the pond. There should always be at least two adults with the group.

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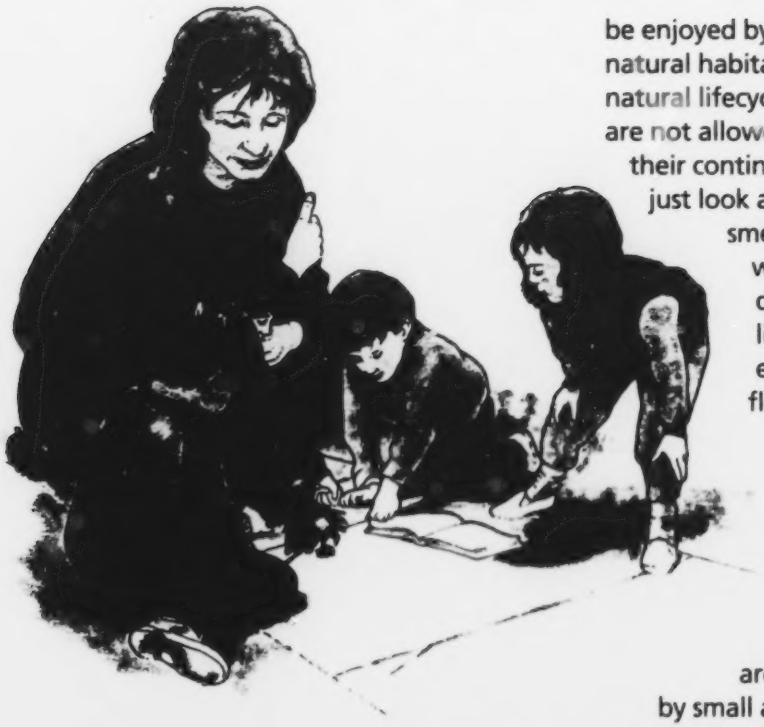
Activity

If at all possible take the children with you to a nearby pond or creek to collect some water, sand or gravel and plants. In one bucket scoop up some water. If you can, collect some small water bugs as well. Use the fish net to scoop up some small plants, or gently pull them from the bottom to ensure the roots are intact. In the other bucket scoop up some of the pond bottom – sand or gravel, and any small rocks you may find. When you return to the facility, the sand or gravel can be layered on the bottom of the jar. Carefully place the root plants and rocks in the sand, and then slowly add the pond water to within 8 centimetres of the top of the jar. For at least 24 hours let the aquarium aerator bubble in the jar to clear the water. Remove the aerator, and seal the jar lid with wax and tape. Don't forget to date the jar so you remember when it was set up. If you use a glass jar ensure the ecosystem is viewed by the children under adult supervision. Use the magnifying glass to observe the bugs and plants in your ecosystem and try to identify them. The lifecycle of the ecosystem will evolve over the seasons and years. Share these changes with the children.

Resources

Pond & River by Steve Parker.



Wildflower Identification

Background

Many wildflowers grow in abundance in sidewalk cracks or in our own yards or playgrounds. Knowledge of the names and lifecycles of these wildflowers develops a sense of awe as we appreciate their stubborn willingness to survive in crowded spaces.

Preparation

To ensure the activity flows smoothly, scout out some locations where wildflowers grow near the child care facility, and identify them prior to taking the children along.

Activity

Take along the wildflower identification book to share the pictures with the children as you look at the flowers. Wildflowers are to be enjoyed by looking at them in their natural habitat. If wildflowers are picked the natural lifecycle process is halted and they are not allowed to go to seed, thus ensuring their continuation. Remind the children to just look at the wildflowers and gently smell them. Observe the different wildflowers in all seasons and discuss the changes as the lifecycle unfolds. It is particularly exciting in the spring to watch flowers begin to poke up through the ground and develop to the stage of their beautiful, fragrant flowers. Observe the different types of seeds wildflowers produce and discuss with the children whether they are spread by the wind, planted by small animals such as squirrels, or drop to the ground on their own. This should be an ongoing activity as conservation of plants and flowers is discussed on neighborhood walks.

Other Activity Ideas to Explore

With the children, dramatize being a wildflower going through its seasonal lifecycle. Sprouting through the ground in the spring, growing into a pretty flower in the summer, and slowly transforming into a seed which is blown by the wind to be planted for the next year. Slowly the plants die as the weather turns cold and then snow falls. The wildflowers rest and sleep in the winter until the cycle begins again with the warm spring sun.

Resources

Wildflowers Across the Prairies by F.R. Vance, J.R. Jowsey, J.S. McLean.

Field Guide to Wildflowers by Roger Tory Peterson.

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Community Nature Guide

Background

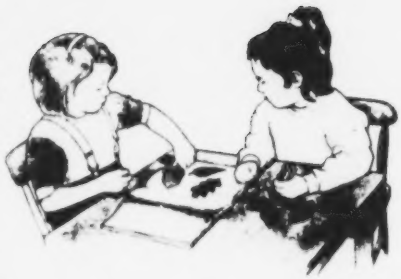
As an ongoing activity collection of leaves, seeds, and pine cones will help the children develop an understanding of life cycles of living objects.

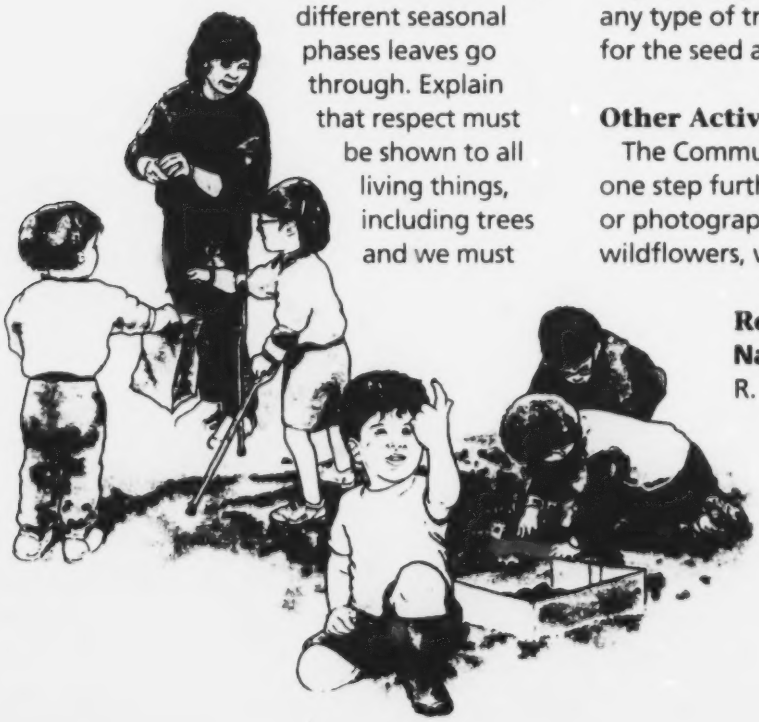
Preparation

A scrapbook or small photo album can be used to contain the collected materials. This activity can be done as a group project, or each child may like to create their own book.

Activity

Leaves, seeds, and pine cones from various trees in your neighborhood can be collected on regular walks. This collection should occur in all seasons to ensure the children begin to become aware of the different seasonal phases leaves go through. Explain that respect must be shown to all living things, including trees and we must not disturb them by taking leaves off their branches or bark off their trunks. However, explain to the children that sometimes trees are pruned to control their growth. Pruning shears are used as they do not harm the tree. Only pick up objects that are lying on the ground to ensure no harm is done to the tree or shrub. Draw attention to the variety of different seasonal colours nature provides. The collected materials can be pressed between the pages of a heavy book, and then placed in the scrap book or photo album. With the children, identify the type of tree the leaves come from and label them in your book. The bulky items, such as pine cones could be glued on a large piece of cardboard for display. Try planting an acorn, maple seed, or any type of tree seed with the children. Care for the seed and watch to see if it will grow.





Other Activity Ideas to Explore

The Community Nature Guide can be taken one step further to include children's artwork or photographs of neighborhood birds, wildflowers, wildlife, and trees.

Resources

Native Trees of Canada by R. C. Hosie.

Earthcycle

Background

This activity should be started at the end of March and will continue until early September; which is a relatively short span of time in which to demonstrate the lifecycle of an object. The children will be encouraged to observe the growth and lifecycle from seed to mature plant to compost material. Growing a tomato plant is suggested but beans, peas, or any other garden vegetable can be used.

Preparation

Prior to beginning the activity gather a tomato, knife, a piece of absorbent paper, package of tomato seeds, reusable containers, soil and water.

Activity

With the children remove the seeds out of a ripe tomato and examine them. Place the seeds on a piece of absorbent paper for a few days so they may dry. Some store-bought tomatoes have sterile seeds so try planting some seeds directly from a tomato, and others from purchased seeds. Discuss the fact that many plants grow from seeds. After the tomato seeds dry for a few days the children can plant them in small reusable containers. Then place them in a sunny window and water daily. Transplant the tomato plants into larger containers when they are approximately 5 – 8 cm. high, or transplant outside. The tomatoes may need to be staked to keep them upright as they grow. They can also be grown in large containers which can be placed outside. Tomatoes grow best in a sunny location. Once the harvest has been reaped from the tomato plant the actual plant can be put in your compost pile to decompose and then used to fertilize your garden. Don't forget to save seeds from one of the tomatoes to try planting next year!

Vegetables Are Plants We Eat

(sung to: "Mary Had a Little Lamb")

Gayle Bittinger **Our World**, Warren Publishing House, Inc.

Vegetables are plants we eat
They're so good, what a treat.
Carrots, tomatoes and broccoli,
They help us grow so healthily.

Resources

From Seed to Plant by Gail Gibbons.

Where do earthworms live?

Background

Earthworms are seemingly insignificant creatures, but in fact they are very helpful. By learning about earthworms, their homes and habits, children will develop respect for their valuable contribution to the ecosystem. Through respect a desire to stomp on earthworms will disappear! This respect must be role-modelled by yourself towards all insects and bugs, and a positive and enthusiastic attitude shown to encourage the children's desire to learn.

Preparation

Prior to taking the children outside, scout out a spot where you can see earthworm tunnels in the ground. When you return to this spot with the children bring along the magnifying glasses, bucket and shovel.

Activity

Encourage the children to lie on their stomachs and use the magnifying glass to look for earthworm tunnels. These tunnels are good for the soil as they provide spaces in the ground which brings air to plant roots. The tunnels aerate the ground to allow rain to soak in deep. When it rains the tunnels become full of water so the earthworms must come out of the ground. That is why we see earthworms on sidewalks after a heavy rain. Carefully dig up some earthworms for the children to examine. Earthworms "see" through their sense of touch, and bristles on their underside help them crawl. Rings around the earthworms body help them twist and turn. Earthworms do have a tail – it always moves forward! Soil is an earthworm's food, which they take in through their mouth. Castings are small piles of an earthworms digested soil. These help fertilize the soil. Share all these earthworm facts with the children and encourage respect by returning the earthworms to their home after you have observed them.

Other Activity Ideas to Explore

Create an earthworm farm or a worm composter.

Earthworm

(sung to: "Did you ever see a Lassie?")
Gayle Bittinger **Our World**, Warren Publishing House, Inc.

Did you ever see an earthworm,
An earthworm, an earthworm,
Did you ever see an earthworm
Move this way and that?
Move this way and that way,
Move this way and that way.
Did you ever see an earthworm
Move this way and that?

What can we put in the water table today?

Background

Respect for all forms of life can be developed through understanding and knowledge. Bringing different types of insects and bugs into the centre and creating a temporary home in the water table will encourage the children to learn the names and habits of the insects and bugs they encounter.

Preparation

The children should be encouraged to participate in the gathering and releasing process whenever possible. Make sure the water table is clean.

Activity

Dependent upon the season a variety of insects, and bugs can be given a temporary home in the water table. Magnifying glasses can also be provided for the children's use. If the activity is not supervised, the water table should be covered to ensure nothing escapes. The insects should be returned to their natural habitat within 24 hours. Once this activity has been done a few times let the children's imagination run wild with ideas!

Seasonal Suggestions

Spring – Pondwater or water from ditches can be collected and put in the water table. The children can be encouraged to look for very small bugs and water beetles with magnifying glasses. The identification resources can be used to help identify the bugs. Talk with the children about the foodchain the bugs are part of. For example, minnows eat small bugs and are in turn food for larger fish.

Summer – spiders, earthworms, lady bugs, caterpillars. Observe the habits of these insects and discuss their helpfulness to our environment with the children. Be sure to include part of the natural habitat in the water table such as, mud, leaves, grass, or water.

Winter – Snow can be observed for very small bugs. Once the snow has melted it can be frozen into solid ice. Any bugs will be captured in the ice and can be easily observed. Look for snow fleas!

Other Activity Ideas to Explore

Create an ant farm with the children. House pondwater with water beetles and bugs in an aquarium.

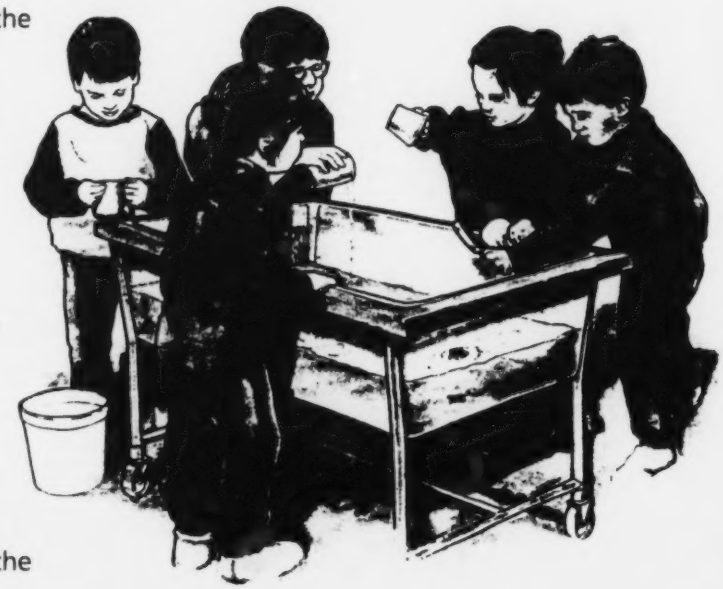
Resources

Pond Life by George K. Reid.

Insects by Herbert S. Zim.

A Guide to Nature in Winter by Don Stokes.

Puddles and Ponds by Phyllis Busch.



Air Pollution

Gayle Bittinger, **Our World**,
Warren Publishing House, Inc.

Background

Although air may be a difficult concept for young children to grasp, as it is not readily visible, certain types of air pollution may be more easily understood because they can be seen, smelled and even tasted. Discuss with the children sources of air pollution, such as exhaust from cars, smoke from fires or chimneys and ask them to look for examples when you are out on neighborhood walks. As breathing clean air is integral to life we must all work to ensure it stays this way.

Preparation

The materials required for this activity are a flashlight, index cards, petroleum jelly and tape.

Activity

Have the children sit in a group. Ask them if they think there is anything in the air around them. Then turn out the lights and shine a flashlight in front of the children. Can they see tiny particles in the air now? Explain that air pollution can travel through the air as dust or smoke particles. Spread petroleum jelly on 4 or 5 index cards and hang some outside and some inside so they may collect particles. Leave the cards in place for one week. Assist the children in collecting the cards. Which cards have the most particles? Which have the least? Where is the most pollution? Let the children examine the particles on their cards with magnifying glasses. Discuss sources of air pollution with children – factories, cars – and discuss non-polluting alternatives such as riding bikes and taking the bus whenever possible.

Other Activity Ideas to Explore

Explore air with the senses of smell, taste, and touch.

Resources

For further activity ideas which create an understanding of air consult:

Our World by Gayle Bittinger.

A Selected Bibliography

Children's Book Resources

Canadian Garbage Collectors by Paulette Bourgeois. *Toronto: Kids Can Press, 1991.*

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"The Garbageless Lunch", No. 19 Green Teacher, *95 Robert Street, Toronto, Ontario, M5S 2K5.*

Knee High Nature Series by Dianne Hayley & Pat Wishart, *52080 Range Road 213, Sherwood Park, Alberta, T8G 1B5.*

Birdwatching for All Ages by Jorie Hunken. Connecticut: *The Globe Pequot Press, 1992.*

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Trees for Tomorrow by Lynne Patchett. *London: A & C Black Publishers, 1990.*

Composting with Kids by the Recycling Council of Ontario, *489 College Street, Suite 504, Toronto, Ontario, M6G 1A5.*

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My First Nature Book by Angela Wilkes. *Toronto: Stoddart Publishing Co. Ltd., 1990.*

My First Green Book by Angela Wilkes. *Toronto: Stoddart Publishing Co. Ltd., 1991.*

McCain Green Ideas Book produced by The Young Naturalists Foundation and McCain Foods.

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